

CURRICULUM VITAE

Profile

Name in full: Junichi HIRUKAWA

Nationality: Japan

Date of Birth: February 6th, 1975

Present Address: Department of Mathematics,
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Educational Background

1994-1998: B.S. student in Mathematics, Waseda University

1998-2000: M.S. student in Mathematical Sciences, Waseda University

2000-2004: Ph. D. student in Mathematical Sciences, Waseda University

Occupation

2004-2006: Research Associate, School of Science & Engineering, Waseda University

2007-present: Associate Professor, Faculty of Science, Niigata University

Research Visits

2001 Feb.-Aug.: Visiting the Research Group of Prof. Zhongjie Xie in Peking University

Research Interest

Statistical Analysis

Time Series Analysis

Wavelet Analysis

Statistical Financial Engineering

Academic Work

- Hirukawa, J.: Discriminant Analysis for Multivariate Non-Gaussian Locally Stationary Processes. *Scientiae Mathematicae Japonicae*, **60**, No.2, 357-380, :e10, 235-258, (2004)
- Taniguchi, M., Hirukawa, J.: The Stein-James Estimator for Short- and Long-Memory Gaussian Processes. *Biometrika*, **92**, No.3, 737-746, (2005)
- Hirukawa, J.: Cluster Analysis for non-Gaussian Locally Stationary Processes. *International Journal of Theoretical and Applied Finance*, **9**, No.1, 113-132, (2006)
- Hirukawa, J., Taniguchi, M.: LAN Theorem for Non-Gaussian Locally Stationary Processes and Its Applications. *Journal of Statistical Planning and Inference*, **136**, No.3, 640-688, (2006)
- Taniguchi, M., Hirukawa, J., Tamaki, K. : *Optimal Statistical Inference in Financial Engineering*, Chapman & Hall. (2007)
- Hirukawa, J., Kato, S. H., Tamaki, K., Taniguchi, M. : Generalized information criteria in model selection for locally stationary processes. *Journal of the Japan Statistical Society*, **38**, No.1, 157-171, (2008)
- Hirukawa, J., Taniai, H., Hallin, M., Taniguchi, M. : Rank based inference for multivariate nonlinear and long-memory time series model. *Journal of the Japan Statistical Society*, **40**, No.1, 167-187, (2010)
- Hirukawa, J. : Wavelet estimation for hidden periodic components in spatial series. *Scientiae Mathematicae Japonicae*, **74**, No. 2&3, 203-230, (2011)
- Taniguchi, M., Hirukawa, J. : Generalized information criterion. *Journal of Time Series Analysis*, **33**, No.2, 287-297, (2012)
- Hirukawa, J., Sadakata, M. : Asymptotic properties of unit root processes with locally stationary disturbance. *Special Issue of Waseda University*, **8**, 31-45, (2012).
- Taniguchi, M., Chen, C. W. S., Hirukawa, J., Shiraishi, H., Tamaki, K., Veredas, D. : Statistical Estimation of Portfolios for Dependent Financial Returns. *Special Issue "Statistical Estimation of Portfolios for Dependent Financial Returns" in Advances in Decision Sciences*, Article ID 681490, 3 pages, (2012).
- Hirukawa, J., Sadakata, M. : Least Squares Estimators for Unit Root Processes with Locally Stationary Disturbance. *Special Issue "Statistical Estimation of Portfolios for Dependent Financial Returns" in Advances in Decision Sciences*, Article ID 572919, 15 pages, (2012).

Hirukawa, J. : On the causality between multiple locally stationary processes. *Special Issue "Statistical Estimation of Portfolios for Dependent Financial Returns" in Advances in Decision Sciences*, Article ID 261707, 15 pages, (2012).

Hirukawa, J. : Large deviation results for discriminant statistics of Gaussian locally stationary processes. *Special Issue "Statistical Estimation of Portfolios for Dependent Financial Returns" in Advances in Decision Sciences*, Article ID 893497, 16 pages, (2012).

Hirukawa, J. : Empirical likelihood method for independent component analysis of locally stationary processes. *Special Issue of Waseda University*, **9**, 45-54, (2013)

We are going to publish

Taniguchi, M., Shiraishi, H., Hirukawa, J., Kato, S. H., Yamashita, T. : *Statistical Portfolio Estimation*, Chapman & Hall.

Junichi Hirukawa

Date: 20th May 2013